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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HERNANDEZ, NELSON D	

ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/531,283	MORITA, MASAHIKO	
	Examiner	Art Unit	
	Nelson D. Hernandez	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *25-27* is/are allowed.

6)☒ Claim(s) *1-24 and 28-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 March 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the amendments made on the claims received on June 27, 2005. Claims 1, 3-9, 11 and 17 have been amended. Claims 25-30 have been newly added.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 6, 9, 10, 14, 17, 18, 22 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaji et al., US Patent 4,320,414 in view of Ogino, US Patent 5,852467.

Regarding claims 1, 9, 17 and 28-30, Miyaji discloses an image pick-up apparatus (Fig. 1) comprising: an image pickup pick-up part (Fig. 1, items 11, 12 and 13) capable of picking up image data of an object; a volatile recording medium (Fig. 5: 43) capable of temporarily recording therein the image data picked up by the image pickup part; a recording part (CPU in fig. 1: 31) capable of recording the image data recorded in said volatile recording medium (Fig. 5: 44) to a nonvolatile recording medium; change-over part (Power Switch; see col. 2, lines 49-57) capable of changing over an operation mode (Power "ON" and "OFF" states) of the image pickup apparatus; and control part (CPU in fig. 1: 31) capable of, if the operation mode has been changed

over by the change-over means before finishing writing-in of image data recorded in the volatile recording medium into the nonvolatile recording medium, irrespective of the status of the volatile recording medium ,executing a process according to the operation mode changed over by the change-over part, after finishing writing-in of the image data recorded in the volatile recording medium into the nonvolatile recording medium (When the power switch is turned "OFF" from the "ON" state the data in the volatile memory 43 is transferred to a non-volatile memory 44) (Col. 2, lines 39-57; col. 3, lines 33-60; col. 4, line 26 – col. 5, line 65) but does not explicitly disclose that the volatile recording medium is capable of recording therein a plurality of the image data picked up by said image pick-up part.

However, having electronic cameras with volatile memories capable of recording a plurality of images is well known in the art as taught by Ogino (See volatile memory Fig. 1: 6, which is capable of recording a plurality of images; col. 3, line 54 – col. 5, line 6; col. 6, lines 6-63; col. 7, lines 52-64; col. 8, line 42 – col. 9, line 5; col. 9, line 60 – col. 10, line 2).

Therefore, taking the combined teaching of Miyaji in view of Ogino as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Miyaji by having a volatile memory capable of recording a plurality of images picked up by the image pick-up part. The motivation to do so would have been to perform continuous photographing operation at an appropriate continuous photographing speed without interrupting the continuous photographing operation, and to record and store all of the photographed image data as suggested by Ogino (Col. 9, line 60 – col. 10, line 2).

Regarding claims 2, 10 and 18, the combined teaching of Miyaji in view of Ogino teaches the same as in claims 1, 9, 17, 28, 29 and 30. Therefore, grounds for rejecting claim 1 apply here.

Regarding claims 6, 14 and 22, the combined teaching of Miyaji in view of Ogino a applied to claims 1, 9, 17, 28, 29 and 30 teaches that the operation processing mode of said image pick-up apparatus includes an image pick-up mode for causing said image pick-up part to pick up image data of an object (Ogino teaches still and continuous operation modes; col. 3, line 54 – col. 5, line 6; col. 6, lines 6-63; col. 7, lines 52-64; col. 8, line 42 – col. 9, line 5; col. 9, line 60 – col. 10, line 2).

4. Claims 3-5, 7, 11-13, 15, 19-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaji et al., US Patent 4,320,414 in view of Ogino, US Patent 5,852467 and further in view of Fellegara, US Patent 6,441,854 B2.

Regarding claims 3, 11 and 19, the combined teaching of Miyaji in view of Ogino does teach that if the processing operation mode has been changed over by said change-over part to the power-off mode, said recording part records in said nonvolatile recording medium the image data recorded in said volatile recording medium, after said control part makes a check of at least one of detection of a voltage of the power supply, attachment or detachment of the power supply and attachment or detachment of said nonvolatile recording medium.

However, Fellegara discloses an image pickup apparatus (Figs. 1 to 6) comprising: image pickup means (Fig. 6: 94) for picking up image data of an object; a volatile recording medium (working memory in fig. 6: 124) for temporarily recording therein the image data picked up by the image pickup means (Fellegara teaches the

working memory is used during image data collection and processing; see col. 8, lines 35-65); a nonvolatile recording medium (Fig. 6: 126 and 130) for recording therein the image data recorded in the volatile recording medium (see col. 8, lines 35-65); change-over means (See fig. 3: 23) for changing over an operation mode (digital capture, film capture and hybrid mode) of the image pickup apparatus (Fellegara also teaches a quick review switch and a power down mode; see col. 10, lines 19-36 col. 13, lines 18-45 and col. 10, lines 37-58, respectively). Fellegara also teaches that if the processing operation mode has been changed over by the change-over means to the power-off mode, the control means records in the nonvolatile recording medium the image data recorded in the volatile recording medium, after making a check of at least one of detection of a voltage of the power supply, attachment or detachment of the power supply and attachment or detachment of the nonvolatile recording medium (Fellegara is capable of indicating the presence of a memory card and the number of images that can be stored on the memory card; see col. 9, lines 51-60., Fellegara teaches, in a power down mode, storing a last captured image working image in volatile memory (Fig. 6: 124). The examiner notes that since Fellegara stores only the last captured image- a single frame- in the temporary memory, the images preceding that last captured image are inherently sent to the nonvolatile memory).

Therefore, taking the combined teaching of Miyaji in view of Ogino and further in view of Fellegara as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to check of at least one of detection of a voltage of the power supply, attachment or detachment of the power supply and attachment or detachment of said nonvolatile recording medium. The motivation to do so would have

been to avoid losing or storing incomplete image data when trying storing to the non-volatile memory.

Regarding claims 4, 12 and 20, the combined teaching of Miyaji in view of Ogino and further in view of Fellegara as applied to claims 3, 11 and 19, teaches indicating the presence of a memory card and the number of images that can be stored on the memory card; thus Fellegara gives a "warning" to the user by displaying that the card is not attached (See Fellegara, col. 9, lines 51-60).

Regarding claims 5, 13 and 21, the combined teaching of Miyaji in view of Ogino and further in view of Fellegara as applied to claims 3, 11 and 19 teaches that the operation processing mode of the image pickup apparatus includes an image reproducing mode for reproducing an image represented by the image data picked up by the image pickup means (Fellegara teaches a review mode where the last captured image can be displayed; see col. 10, lines 18-45), Fellegara also teaches a review mode where all captured images can be displayed sequentially; see col. 13, line 61 – col. 14, line 19).

Regarding claims 7, 15 and 23, the combined teaching of Miyaji in view of Ogino and further in view of Fellegara as applied to claims 3, 11 and 19 does not teach giving a predetermined warning to a user if there is no unused capacity in the volatile recording medium. However, since Fellegara reveals that it is well known to indicate the number of images that can be stored in a nonvolatile memory, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the same option available for the volatile memory. One would have been motivated to do so in an effort to increase ease of operability.

5. Claims 8, 16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaji et al., US Patent 4,320,414 and Ogino, US Patent 5,852467 in view of Fellegara, US Patent 6,441,854 B2 and further in view of Uehara (US5481303).

Regarding claims 8, 16 and 24, the combined teaching of Miyaji in view of Ogino and further in view of Fellegara as applied to claims 3, 11 and 19 does not teach giving a warning to a user different from the predetermined warning if there is no unused capacity in the nonvolatile recording medium.

However, Uehara teaches a camera capable of indicating the available capacity of a recording medium and giving a warning in different forms- variable flash speeds- based on the available capacity of the recording medium (see col. 6, line 32 to col. 7, line 44).

Even though Uehara's device is directed toward a single memory, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the image pick-up apparatus with Uehara's teachings. It would have been highly desirable, since Fellegara has different storage mediums for different image capture modes, for the image pick-up apparatus to distinguish the different storage means by varying flash speeds indicating available capacity as taught by Uehara. One would have been motivated to do so in an effort to increase ease of operability.

Allowable Subject Matter

6. **Claims 25-27** are allowed.

Regarding claims 25-27, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest a control part

capable of, if the image capture mode has been changed over to the reproduction mode by said change-over part before finishing writing-in of the image data recorded in said volatile recording medium into said nonvolatile recording medium, executing the reproduction mode, after finishing writing-in of the image data recorded in said volatile recording medium into said nonvolatile recording medium.

Miyaji discloses an image pick-up apparatus (Fig. 1) comprising: an image pickup pick-up part (Fig. 1, items 11, 12 and 13) capable of picking up image data of an object; a volatile recording medium (Fig. 5: 43) capable of temporarily recording therein the image data picked up by the image pickup part; a recording part (CPU in fig. 1: 31) capable of recording the image data recorded in said volatile recording medium (Fig. 5: 44) to a nonvolatile recording medium; change-over part (Power Switch; see col. 2, lines 49-57) capable of changing over an operation mode (Power "ON" and "OFF" states) of the image pickup apparatus; and control part (CPU in fig. 1: 31) capable of, if the operation mode has been changed over by the change-over means before finishing writing-in of image data recorded in the volatile recording medium into the nonvolatile recording medium, irrespective of the status of the volatile recording medium ,executing a process according to the operation mode changed over by the change-over part, after finishing writing-in of the image data recorded in the volatile recording medium into the nonvolatile recording medium (When the power switch is turned "OFF" from the "ON" state the data in the volatile memory 43 is transferred to a non-volatile memory 44) (Col. 2, lines 39-57; col. 3, lines 33-60; col. 4, line 26 – col. 5, line 65) but does not explicitly disclose that the volatile recording medium is capable of recording therein a plurality of the image data picked up by said image pick-up part.

Fellegara discloses an image pickup apparatus (Figs. 1 to 6) comprising: image pickup means (Fig. 6: 94) for picking up image data of an object; a volatile recording medium (working memory in fig. 6: 124) for temporarily recording therein the image data picked up by the image pickup means (Fellegara teaches the working memory is used during image data collection and processing; see col. 8, lines 35-65); a nonvolatile recording medium (Fig. 6: 126 and 130) for recording therein the image data recorded in the volatile recording medium (see col. 8, lines 35-65); change-over means (See fig. 3: 23) for changing over an operation mode (digital capture, film capture and hybrid mode) of the image pickup apparatus (Fellegara also teaches a quick review switch and a power down mode; see col. 10, lines 19-36 col. 13, lines 18-45 and col. 10, lines 37-58, respectively). Fellegara also teaches that if the processing operation mode has been changed over by the change-over means to the power-off mode, the control means records in the nonvolatile recording medium the image data recorded in the volatile recording medium, after making a check of at least one of detection of a voltage of the power supply, attachment or detachment of the power supply and attachment or detachment of the nonvolatile recording medium (Fellegara is capable of indicating the presence of a memory card and the number of images that can be stored on the memory card; see col. 9, lines 51-60., Fellegara teaches, in a power down mode, storing a last captured image working image in volatile memory (Fig. 6: 124). The examiner notes that since Fellegara stores only the last captured image- a single frame- in the temporary memory, the images preceding that last captured image are inherently sent to the nonvolatile memory).

However, the teaching of Miyaji and Fellegara, either alone or in combination fails to teach or reasonably suggest a control part capable of, if the image capture mode has been changed over to the reproduction mode by said change-over part before finishing writing-in of the image data recorded in said volatile recording medium into said nonvolatile recording medium, executing the reproduction mode, after finishing writing-in of the image data recorded in said volatile recording medium into said nonvolatile recording medium.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:00 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez
Examiner
Art Unit 2612

NDHH
September 18, 2005